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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,666	08/16/2006	Koji Hamano	2006_1329A	9967

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EXAMINER	
DYE, ROBERT C	

ART UNIT	PAPER NUMBER
4151	

MAIL DATE	DELIVERY MODE
12/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,666	HAMANO ET AL.	
	Examiner	Art Unit	
	ROBERT DYE	4151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/16/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 02/18/2004. It is noted, however, that applicant has not filed a certified copy of the 2004-041374 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunehisa et al. (JP2003-053779, already of record, with partial machine translation).

6. Regarding claim 1, Tsunehisa et al. (hereinafter Tsunehisa) teach a two-sides in-mold decoration die in their second embodiment (see figures 8 and 9) wherein two decoration films are movably disposed inside a decoration die and are arranged such that they intersect in a perpendicular manner (see figure 8 and paragraph 33). The apparatus of Tsunehisa includes a first mold (3) on which a first decoration film is movably disposed (51) and a second mold (4) on which a second decoration film is movably disposed (52). Furthermore, the molding die of Tsunehisa contains a protruding section (see right side of die in figures 9a-e) which contacts the first film and forms a resin channel (4a) for introducing molten resin into the second mold cavity (4b). Said resin channel defines the end of a runner and a gate for introducing the resin into the mold cavity. Tsunehisa fails to state that the protruding section corresponds to a non-passing region of the second decoration film and as seen in figures 9a-e, the second film partially overlaps a region of the resin channel. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to reduce the width of the film as needed to provide for reduced coverage of the

second film's decoration on the molded product. The apparatus would thus be capable of clamping down the two mold cavities to form the resin channel with the protruding area corresponding to a non-passing region of the second film.

7. Regarding claim 5, Tsunehisa illustrates that the mold cavities are recessed with respect to the clamping force supporting portions of the die sets (see figure 9, cavities are recessed in vertical direction and the mold portions clamp in vertical direction).

8. Regarding claim 6, Tsunehisa et al. (hereinafter Tsunehisa) teach a method for molding a product in a two-sides in-mold decoration die in their second embodiment (see figures 8 and 9). In particular, Tsunehisa teach the provision of a first mold (3) on which a first decoration film is movably disposed (51) and a second mold (4) on which a second decoration film is movably disposed (52). Tsunehisa teach that the two films intersect perpendicularly in the mold die (paragraph 33). Furthermore, the molding die of Tsunehisa contains a protruding section (see right side of die in figures 9a-e) which contacts the first film and defines a channel (4a) for introducing molten resin into the second mold cavity (4b). Tsunehisa teaches that the upper and lower molds are clamped and a molten resin is injected into the mold cavity (paragraph 36, figures 9a-e).

9. Tsunehisa fails to state that the protruding section corresponds to a non-passing region of the second decoration film and as seen in figures 9a-e, the second film partially overlaps a region of the resin channel. However, it would have been obvious for a person having ordinary skill in the art at the time the

invention was made to reduce the width of the film as needed to provide for reduced coverage of the second film's decoration on the molded product.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunehisa (JP Patent Publication 2003-053779, already of record, with partial machine translation) as applied to claim 1 above, and further in view of Ishikawa (JP Patent Publication 08-025414, already of record, with partial machine translation).

11. Tsunehisa teaches the two-sides in-mold decoration molding apparatus with a protruding section defining a resin channel as described above for claim 1. Tsunehisa does not teach that the protruding section has the same thickness as that of the second decoration film. In the same field of endeavor of in-mold decoration via the use of transfer films, Ishikawa teaches an in-mold decoration mold wherein the mold surface part and its periphery are deleted in the thickness of the film (translated abstract). Ishikawa teaches that the distortion of the metallic mold and break through of molding material can be prevented when clamping force is applied by providing a depression having the same thickness of the film (paragraph 21 in machine translation). In providing this depressed area for the film, the adjacent areas would thus be recognized as protruding relative to the film area with a thickness the same as the film. Thus, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a protrusion adjacent to the film with the same thickness of the film as taught by Ishikawa in the apparatus of Tsunehisa for the purpose of

preventing distortion of the mold and leakage ("break through") of material during mold closing (paragraph 21).

12. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunehisa et al. (JP Patent Publication 2003-053779, already of record, with partial machine translation) as applied to claim 1 above, and further in view of Pratt et al. (USP 5,662,946).

13. Regarding claims 3 and 4, Tsunehisa teaches the two-sides in-mold decoration molding die as described above for claim 1, but does not teach that a block containing the runner system is inserted into the mold and that the upper and lower molds contain inserts for the cavity forming faces. In the same field of endeavor of injection molding apparatus, Pratt et al. (hereinafter Pratt) teach that it is advantageous to have an adaptable mold base wherein die inserts (col 2, lines 57-60) as well as components for transferring molten material into the actual molding chamber (col 3, lines 2-4) can be removed and replaced from the adaptable mold base. Pratt teach that production time and costs can be reduced by switching out individual mold components rather than redesigning an entire mold assembly for each mold product (col 1, lines 47-52). Thus, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a modular mold system as taught by Pratt wherein inserts are provided for the mold cavity die and the runner system in the apparatus of Tsunehisa for the purpose of allowing interchangeable mold cavity designs to be used within the same molding system for the benefit of reducing mold fabrication costs.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunehisa (JP Patent Publication 2003-053779, already of record, with partial machine translation) as applied to claim 6 above, and further in view of Ishikawa (JP Patent Publication 08-025414, already of record, with partial machine translation).

15. Tsunehisa teaches a method for making a product with a two-sides in-mold decoration molding apparatus with a protruding section defining a resin channel as described above for claim 6. While figures 9a-e illustrate that the protruding section makes close contact with the first film upon clamping the molds, Tsunehisa does not teach that the protruding section has the same thickness as that of the second decoration film. In the same field of endeavor of in-mold decoration via the use of transfer films, Ishikawa teaches an in-mold decoration mold wherein the mold surface part and its periphery are deleted in the thickness of the film (translated abstract). Ishikawa teaches that the distortion of the metallic mold and break through of molding material can be prevented when clamping force is applied by providing a depression having the same thickness of the film (paragraph 21 in machine translation). In providing this depressed area for the film, the adjacent areas would thus be recognized as protruding relative to the film area with a thickness the same as the film. Thus, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a protrusion adjacent to the film with the same thickness of the film as taught by Ishikawa in the apparatus of Tsunehisa for the

purpose of preventing distortion of the mold and leakage ("break through") of material during mold closing (paragraph 21).

16. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunehisa et al. (JP Patent Publication 2003-053779, already of record, with partial machine translation) in view of Ishikawa (JP Patent Publication 08-025414, already of record, with partial machine translation) as applied to claim 2 above, and further in view of Pratt et al. (USP 5,662,946).

17. Regarding claim 8, Tsunehisa teaches the two-sides in-mold decoration molding die with a protruding section defining the resin channel as described above for claim 2, but does not teach that the mold portion contains insert areas and block containing the runner system is inserted into the mold. In the same field of endeavor of injection molding apparatus, Pratt et al. (hereinafter Pratt) teach that it is advantageous to have an adaptable mold base wherein die inserts (col 2, lines 57-60) as well as components for transferring molten material into the actual molding chamber (col 3, lines 2-4) can be removed and replaced from the adaptable mold base. Pratt teach that production time and costs can be reduced by switching out individual mold components rather than redesigning an entire mold assembly for each mold product (col 1, lines 47-52). Thus, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a modular mold system as taught by Pratt wherein inserts are provided for the mold portions and the runner system in the apparatus of Tsunehisa for the purpose of allowing interchangeable mold cavity designs to

be used within the same molding system for the benefit of reducing mold fabrication costs.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT DYE whose telephone number is (571)270-7059. The examiner can normally be reached on Monday to Friday 8:00AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on (571)272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. D./

/Angela Ortiz/
Supervisory Patent Examiner, Art Unit 4151